

**REMARKS**

In response to the final Office Action mailed July 30, 2002, the Applicant respectfully requests reconsideration.

To further the prosecution of this application, amendments have been made in the claims, as illustrated in the document submitted herewith entitled "Marked-up Claims." Claims 21-23, 25-38 and 40 were previously pending in this application. Claims 21, 22, 25, 27, 30, 32, 36, 37 and 40 have been amended for clarification. As a result, claims 21-23, 25-38 and 40 remain pending for examination, of which claims 21, 30, 32, 36 and 40 are independent.

Applicant's attorneys appreciated the opportunity of discussing proposed claim amendments with Examiner Logsdon during telephone interviews on September 3 and 4, 2002. Applicant has amended the claims in accordance with those telephone interviews as illustrated in the document attached hereto titled "Marked-Up Claims".

Claims 21-23, 25, 28 and 40 stand rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth under paragraph 3 of the Office Action. In response to these rejections, Applicant has amended claims 21, 30, 32, 36 and 40. Further, Applicant has amended claims 22, 25, 27 and 37 for additional clarification.

Applicant respectfully submits that as a result of these amendments, claims 21-23, 25-38 and 40 satisfy the requirements of 35 U.S.C. §112, second paragraph. Accordingly, applicant respectfully requests that the rejection of these claims under §112, second paragraph, be withdrawn.

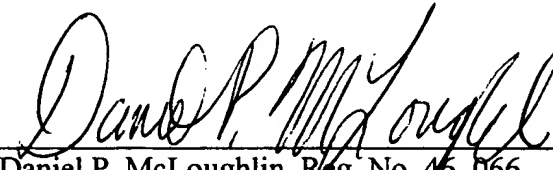
**CONCLUSION**

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/1127.

Respectfully submitted,  
*George Varghese et al., Applicants*

By:

  
Daniel P. McLoughlin, Reg. No. 46, 066  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2211  
Tel. No.: (617) 720-3500  
Attorney for Applicant

Docket No.: E00378.70942/JNA/DPM

Date: September 2, 2002

x10/30/02X

**Marked-Up Claims**

21. A method of operating a network bridge having a first plurality of ports through which network communications pass to and from the bridge, the method comprising:
- assigning a group identifier to each port of the first plurality of ports, wherein all ports with a same assigned group identifier are in a same group;
  - receiving a communication on a first port of the bridge; and
  - if the first port is one of the first plurality of ports and the communication is a multicast packet having a multicast destination address, sending the communication out of the bridge on all other ports of the first plurality of ports [bridge] having the same assigned group identifier as the first port[,
  - wherein the communication is a multicast packet having a multicast destination address].
22. The method of claim 21, further comprising:
- identifying a source of the communication received on the first port of the bridge[; and
  - maintaining an association of the identified source with the assigned group identifier of the first port].
25. The method of claim 21, wherein the bridge includes a client port not included within the first plurality of ports and the communication is a multicast packet, the method comprising:
- receiving the multicast packet on the client port;
  - identifying a group identifier within the multicast packet; and
  - sending the multicast packet out on those ports having the same group identifier as the group identifier within the received multicast packet.
27. The method of claim 21, further comprising:
- assigning a protocol type to each group identifier;
  - wherein, for each port of first plurality of ports, the protocol type identifies a communication protocol used by a station connected to the [respective] port.

30. A method of operating a network bridge having a first plurality of ports through which network communications pass to and from the bridge, the method comprising:

assigning a group identifier to each port of the first plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

receiving a communication on a first port of the bridge;

if the first port is one of the first plurality of ports, sending the communication out of the bridge on all other ports of the first plurality of ports [bridge] having the same assigned group identifier as the first port;

identifying a source of the communication received on the first port of the bridge;

[maintaining an association of the identified source with the assigned group identifier of the first port;]

identifying a destination of the communication;

determining a group identifier assigned to the destination; and

if the group identifier assigned to the destination and the group identifier assigned to the source are different, sending the communication out a client port not included within the first plurality of ports and indicating the group identifier assigned to the first port within the communication sent out the client port.

32. A method of operating a network bridge having a first plurality of ports through which network communications pass to and from the bridge, the method comprising:

assigning a group identifier to each port of the first plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

connecting a router to a client port of the bridge not within the first plurality of ports;

identifying the ports on the router connected to the network bridge;

defining, on the router, a correspondence between the identified ports connected to the network bridge and each distinct group identifier;

receiving a communication on a first port of the bridge;

if the first port is one of the first plurality of ports, sending the communication out of the bridge on all other ports of the bridge having the same assigned group identifier as the first port;

identifying a source of the communication received on the first port of the bridge;



[maintaining an association of the identified source with the assigned group identifier of the first port;]

identifying a destination of the communication;

determining a group identifier assigned to the destination; and

if the group identifier assigned to the destination and the group identifier assigned to the source are different, sending the communication out the client port.

36. A computer program product for use with a network device having a computer and a first plurality of ports on which network communications pass to and from the network device, wherein the network device includes a client port not within the first plurality of ports, and the computer program product comprises computer program instructions that when executed by the computer direct the computer to perform a method of directing the network communications, the method comprising:

assigning a group identifier to each port of the first plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

receiving a communication on a first port of the network device;

if the first port is one of the first plurality of ports, sending the communication out of the network device on all other ports of the first plurality of ports [network device] having the same assigned group identifier as the first port;

receiving a multicast packet having a multicast destination address on the client port;

identifying a group identifier within the multicast packet; and

sending the multicast packet out on those ports having the same group identifier as the group identifier within the received multicast packet,

wherein the group identifier is removed from the multicast packet before sending the multicast packet out from the network device.

37. The computer program product of claim 36, wherein the method further comprises:

identifying a source of the communication received on the first port [of the network device; and

maintaining an association of the identified source with the assigned group identifier of the first port].

40. A computer program product for use with a network device having a computer and a first plurality of ports on which network communications pass to and from the network device, the computer program product comprising computer program instructions that when executed by the computer direct the computer to perform a method of directing the network communications, the method comprising:

assigning a group identifier to each port of the first plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

receiving a communication on a first port of the network device;

if the first port is one of the first plurality of ports, sending the communication out of the network device on all of the ports of the first plurality of ports [network] having the same assigned group identifier as the first port;

identifying a source of the communication received on the first port [of the network device];

maintaining an association of the identified source with the assigned group identifier of the first port];

identifying a destination of the communication;

determining a group identifier assigned to the destination; and

if the group identifier assigns to the destination and the group identifier assigned to the source are different, sending the communication out a client port not within the first plurality of ports, indicating the group identifier of the first port within the communication sent out the client port and replacing a redundant field within the communication with the group identifier.